

CLAIMS

What is claimed is:

1. Process for forming a bonded pair of substrates comprising the steps of applying a thin coating of a heat-curable, photopatternable epoxy polymer composition to a lower substrate; drying said coating to form a semi-solid adhesive layer; photoexposing said semi-solid adhesive layer, through a mask and developing passageways therethrough, to form a patterned adhesive epoxy layer; pressing said patterned adhesive layer and supporting lower substrate against the surface of an upper substrate to bond said adhesive layer to said substrates and form a bonded pair of substrates.
2. Process of claim 1 wherein one of the two substrates is a microelectronic wafer containing multiple die sites, each die of which contains electronic circuitry.
3. Process of claim 2 wherein the bonded pair of substrates is subsequently singulated into individual microfluidic devices.
4. Process of claim 3 in which the microfluidic device is a die module for a thermal ink jet printhead.